Joint Capabilities Integration & Development Syste

Jrgent Needs
&
JCIDS

19 April 2005

Joint Staff / J-8
Capabilities and Acquisition Division

Joint Rapid Action Cell
&
JS Urgent Needs Process Integration & Synchronization

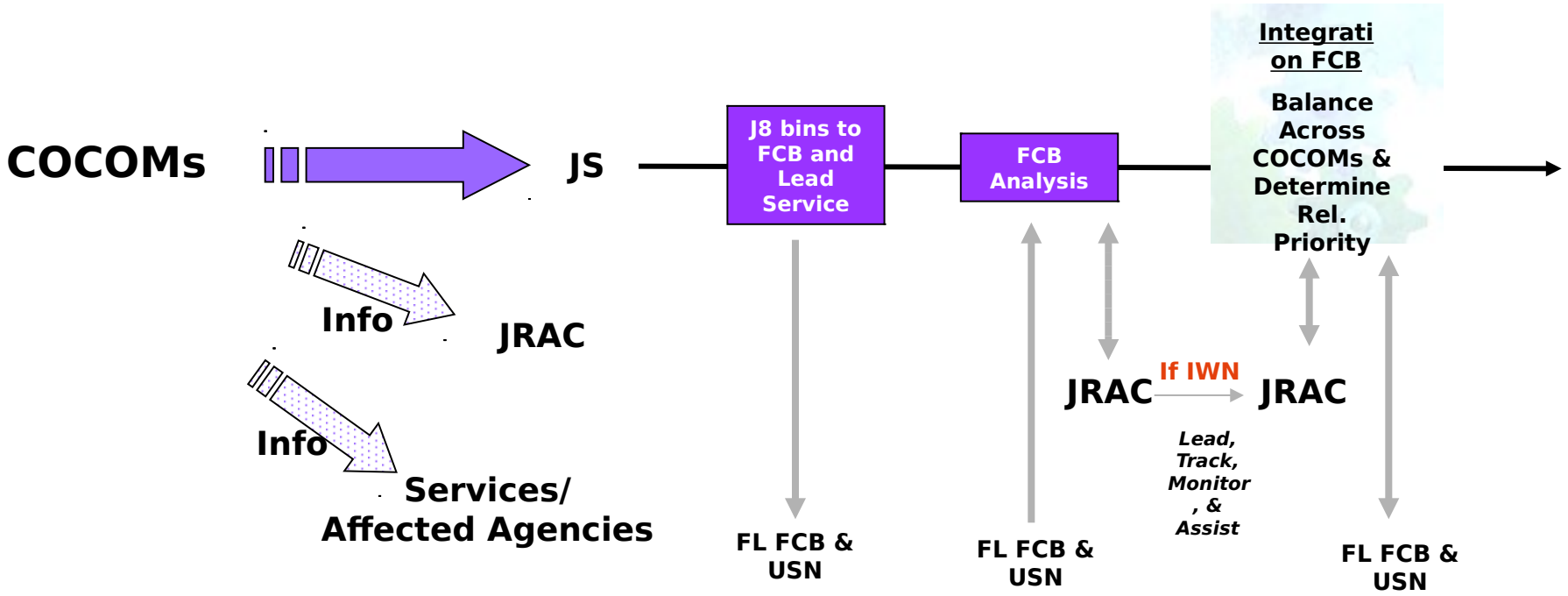
Process Integration

Prioritized Jnt Urgent Needs Shortfall

< 48 hrs

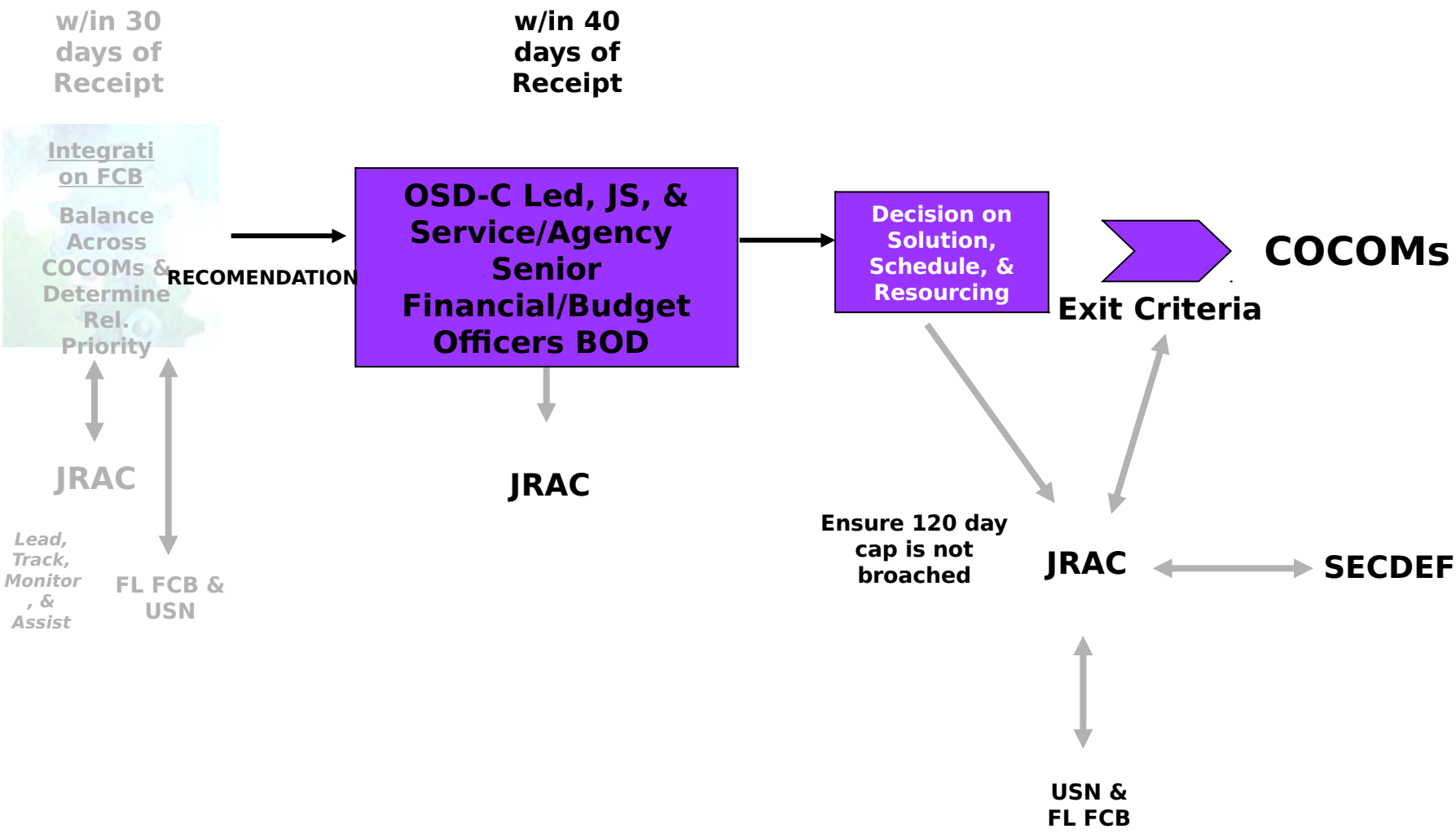
<= 2 wks + 2 days

w/in 30 days of Receipt



Recommended
- **Solution**
- **Schedule**
- **Resourcing Options (e.g. Supp, Mid-Yr, etc)**

Process Integration (cont'd)



Roles & Responsibilities

"New" JS Process: How we Validate, Fulfill, & Resource

- Receive validated & prioritized Jnt Urgent Operational Needs (JUONs) from COCOM
- In harmony w/Lead Service develop candidate solutions, schedule , & resourcing
- Integrate the priority of submitted JUON w/in the COCOM and across multiple COCOMs
- In harmony w/Lead Service recommend

JRAC: Oversight, Assistance, & Follow Through

- Receive copy of JUONs
- Evaluate proposed solutions during JS-led process
- Identify appropriate materiel & logistics solutions as IWNs
- Attend Integration meetings that address identified IWNs
- Attend OSD-C led BODs that address IWNs
- Assist throughout JS process in solution building, barrier

Joint Capabilities Integration & Development System

(JCIDS)

Previous Requirements and Acquisition Process

- As a rule, CONOPs and requirements were Service-focused
- Analysis was primarily threat-based
- Process lacked a construct for Joint analysis "up-front"
- Systems integration tended to be forced in at end game
- Duplication existed, particularly in smaller programs
- Spiral acquisition was not well institutionalized
- Joint warfighting needs were not prioritized

Capability Based Methodology

Requirements Generation System (RGS)- ~30 years of experiences

Partially Interoperable

Late Integration

Services Build Systems

Service Experimentation, Assessment & Analysis, Validation, Selection of Solutions

Service Unique Strategic Visions and Requirements

Joint Capabilities Integration and Development System (JCIDS)- 1.5 years old

Strategic Direction

Joint Warfighting Concept Development

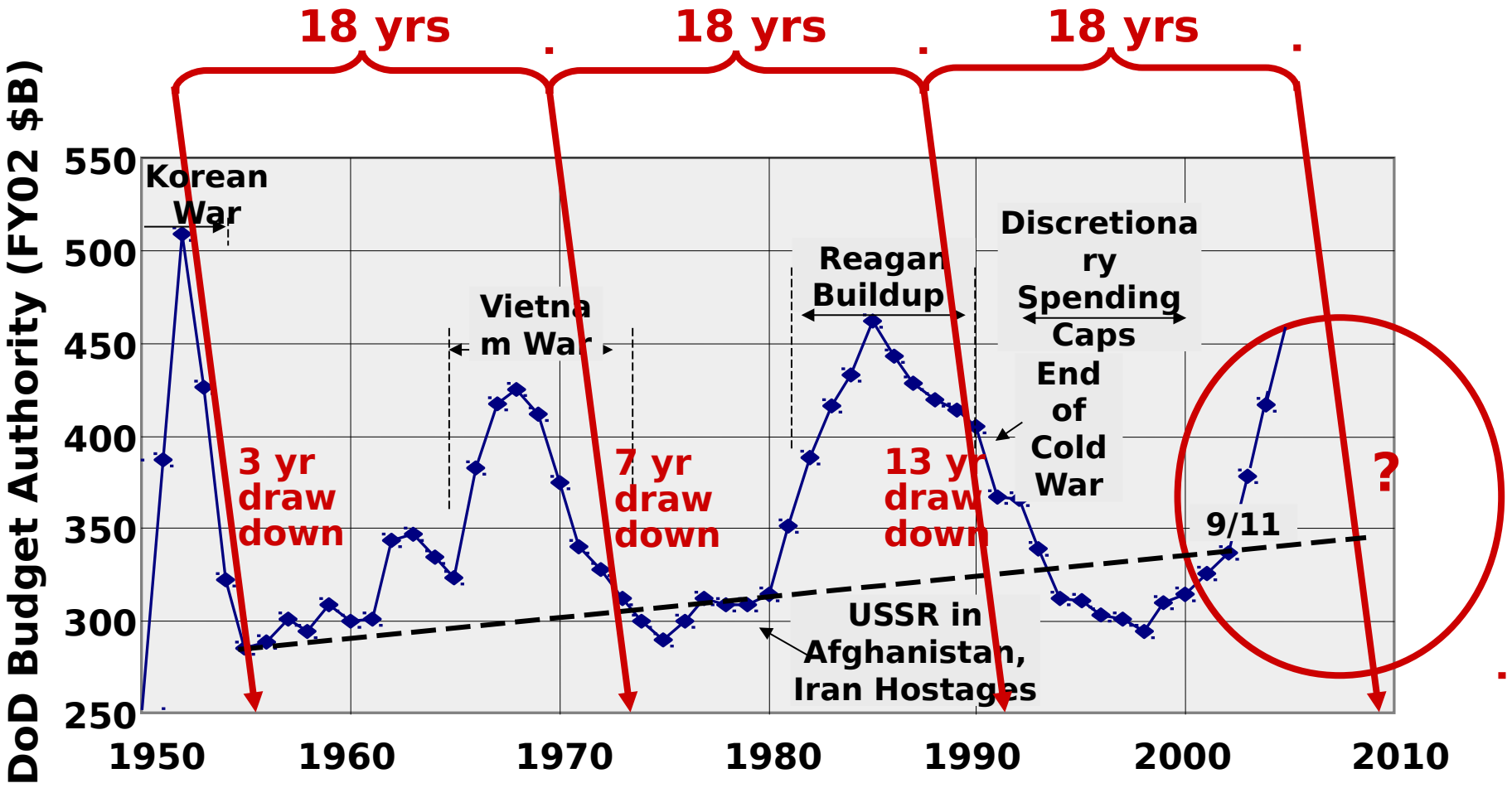
Joint Experimentation, Assessment & Analysis, Validation, Selection of Solutions

Services, COCOMs

Joint Capabilities

Why Get it Right Now?

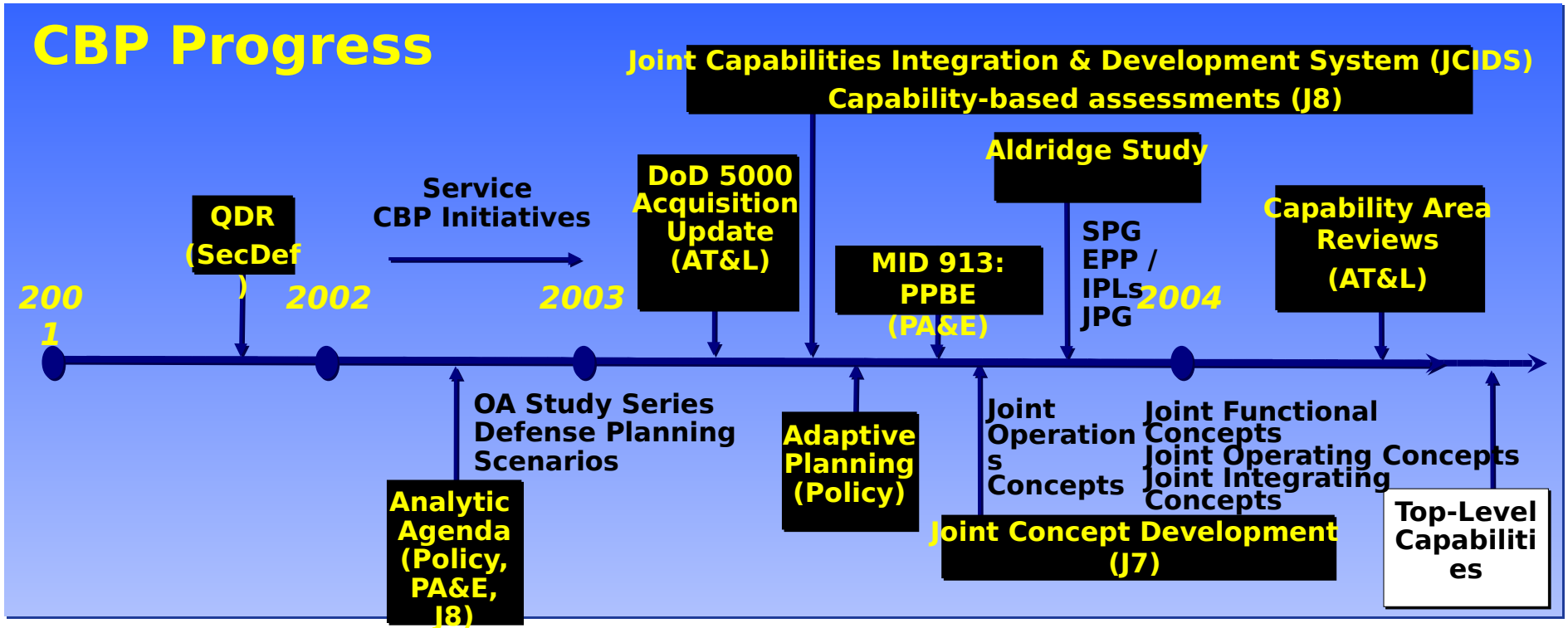
Will the cyclic pattern in defense spending continue?



Real DoD Growth Rate, 1955 – 2002 = 0.4%

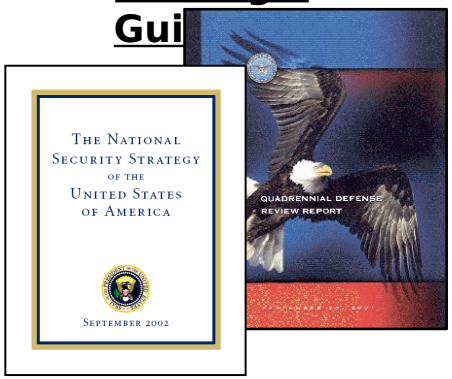
New Capabilities-Based Processes

- PPBS, the last major change in DoD resource management (1960s), was based on a decade of prior analytical development

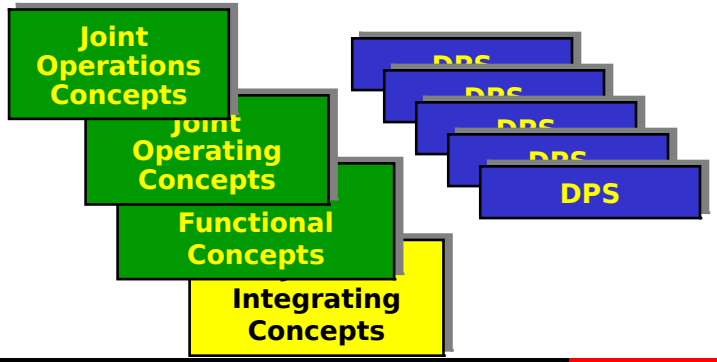


JCIDS Evolution – Concepts to Capabilities

Strategic Gui



Joint Concepts and MSFD scenarios

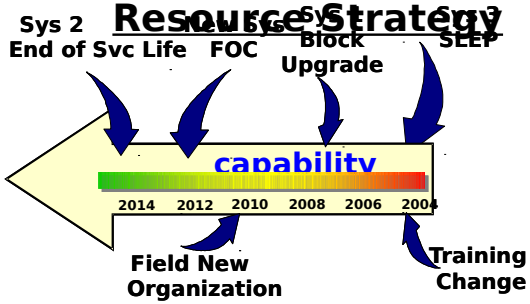


First order assessment using operational tasks and force elements

Detect	Track	ID	Engage	Assess

SecDef | **Joint Chiefs of Staff** | **Joint Requirements Oversight Coun**

Capability Roadmap & Resource Strategy



Provide DOTMLPF Solutions

Initial Capabilities Document

Operational Modeling to identify gaps and excesses

Secretary of Defense | **Services** | **nt Requirements Oversight Counc**

Operational Availability

- **Operational Availability Studies assess <u>mid-term</u> (end of program) warfighting scenarios**

- **Each Operational Availability Study leverages previous efforts (tools, data, personnel)—large pool of capability**

- **Collaborative effort of Staff, Services, and COC**

<u>OA-03</u>

- **Multiple-theaters**
- **Warfight focus: analyze "Swiftly Defeat" concep**

<u>OA-04</u>

- **Single theater**
- **Warfight focus: Assess overlapping regime change and Swiftly Defeat**
- **Post-hostiliti**

<u>OA-05</u>

- **Multiple warfights**
- **Assess full range of military ops over a 7-year time-frame**
- **Assess full**

Expanding scope of analysis:

- **Across the range of military ops**
- **Advancing metrics and tools**
- **Capability assessment**

Tier 1 Capabilities – Starting point for OA

- Battlespace Awareness
- Command and Control
- Net-Centric Operations
- Interagency Integration
- Information Affairs
- Information Operations
- Protection
- Logistics
- Force Generation
- Force Management
- Homeland Defense
- Strategic Deterrence
- Shaping & Security Cooperation
- Stability Operations
- Civil Support
- Non-Traditional Operations
- Access & Access Denial Operations
- Land Control Operations
- Maritime/Littoral Control Operations

These would serve as a common lexicon for various CBP processes

Tier 2 Capabilities - Starting Point for CBA

- **Homeland Defense**
  Security of the Mobilized Force, Bases, Reach-back Infrastructure, National Infrastructure; Continuity of Operations, Securing Domestic Approaches & Territory, Critical Infrastructure Protection (CIP), Population Protection, Homeland Air & Missile Defense
- **Strategic Deterrence**
  Overseas Presence, Force Projection, Global Strike
- **Shaping & Security Cooperation**
  DoD Support to Nonproliferation, Security Assistance, Theater Security Cooperation Inducements
- **Stability Operations**
  Peace-Keeping, Security, Humanitarian Assistance, Foreign CM, Civil Affairs, Reconstruction, Transition
- **Civil Support**
  Military Assistance to Civil Authorities (Military Support to Civil Law Enforcement Activities (MSCLEA) & Military Assistance to Civil Disturbances (MACDIS)), Consequence Management (Domestic), Counter-Drug Operations, Continuity of Government
- **Non-Traditional Operations**
  Unconventional Warfare, Direct Action, Counterterrorism, Counterproliferation of WMD, Foreign Internal Defense, Insurgency/Counter-Insurgency Support, Special Recon
- **Access & Access-denial Operations**
  Operational Access, Forcible Entry, LOC Protection, Freedom of Navigation, Basing (Including Sea Basing), Blockade, Quarantine
- **Land Control Operations**
  Offensive Land Ops, Defensive Land Ops, Retrograde Land Ops, Operational Mobility, Control Territory, Populations, and Resources
- **Maritime/Littoral Control Operations**
  Surface Warfare, Undersea Warfare, Maritime Interdiction Operations, Anti-Sub Warfare, Mine Warfare
- **Air Control Operations**
  OCA, DCA, SEAD, Strategic Attack, Theater Missile Defense, Force & Supply Interdiction, Airspace Control
- **Space Control Operations**
  Offensive counterspace operations, Defensive

The JROC Capability-Based Assessment Process

Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | Month 6 | Month 7 | Month 8 | Month 9 | Month 10 | Month 11

Joint Integrating Concept Development & Mission Analysis

Resourcing & TOR Development

Concept Development
- Tasks
- Capabilities
  - Attributes
  - Metrics
- Concurrent Development of DPS-based vignette

Capabilities-Based Assessment

FAA
- Capabilities
- Tasks
- Attributes
- Metrics

FNA
- Gaps
- Shortfalls
- Redundancies
- Risk Areas

FSA
- Determine initial Non-materiel & Materiel Alternatives
- Recommend a prioritized capability approach to meet the need, including initial TRL, sustainability, supportability, schedule of delivery, and affordability assessments
- Assess operational risk of each approach
- Consider S&T Initiatives
- ID Experimentation needs

Campaign-level Analysis

Experimentation Inputs/Recs

Solutions
- Material
- Non-Material

SPONSOR

COCOM or Service

FCBs: USMC, Army, Navy, COCOMs, Air Force, OSD (AT&L), DIA, OSD (NII), OSD (PA&E)

DOD End-to-End Capabilities, Acquisition, and Test Process

DAB Capability Area Reviews (CARs)

- Strategic Planning Guidance
- Defense Planning Scenarios
- Family of Concepts
- Transform a-tion

Capabilities Based Assessment

- Capabilities
- Tasks
- Attributes
- Metrics
- Gaps
- Shortfalls
- Redundancies
- Risk areas
- Non-materiel solutions
- Materiel solutions
- S+T initiatives
- Experimentation

- Refined concept
- Analysis of Alternatives
- Technology Development Strategy
- SoS System Engineering

- Affordable military-useful increment
- Technology demonstrated
- Initial KPPs
- SEP

- Revise KPPs
- Detailed design
- System integration
- DT&E

- LRIP
- IOT&E

activity

Select a Joint Integrating Concept | Develop Concept | Functional Area Analysis | *Functional Needs Analysis | *Functional Solutions Analysis | ICD | Concept Decision | Analysis of Alternatives | MS "A" | Technology Development | CDD | MS "B" | System Development | CPD | MS "C" | Production

Capability Based Assessment

OSD/JCS

COCOM

FCB

OSD (AT&L)-led Capability Roadmaps

Evolutionary or Spiral Development

Services

oversight

SecDef | Joint Chiefs of Staff & Joint Requirements Oversight Council | Joint Staff / OSD (OSD) | OSD (AT&L, PA&E), Services and OSD (DOT&E) -- Joint Staff (JROC)

Policy | Capabilities Definition | Concept Refinement | Acquisition and Test

*"as is" Roadmaps

JCIDS Updates

- Incorporated DOTMLPF Change Requests (CJCSI 3180)
- Insensitive Munitions Certification Process
- Transition of ACTDs into the JCIDS process
- COCOM ICD submissions
- Incorporation of business systems
- Increased emphasis on JICs versus architectures
- Key Performance Parameter Guidance

JCIDS Lessons Learned . . .

- **Building a process "on the fly" presented several challenges**
  - **False starts, dead ends, institutional inertia, etc.**
- **We have made good headway building the necessary tools**
  - **Adoption of JICs, 1st Order analysis tools, OA Studies**
- **Assessments like to gravitate into "the weeds"**
  - **CBAs need to stay focused at the JTF and Department levels**
- **Right blend of analysis & operational expertise is important**
  - **JCIDS must be timely and responsive . . . Start with 80% solution**

?Questions?

Joint Capabilities Integration & Development Syste

JCIDS
Points of Contact

CAPT Jimmer Sullivan	***(703) 614-6660***
Mr. Bill Cooper	***(703) 697-7525***
Col Matt Mulhern	***(703) 693-4520***

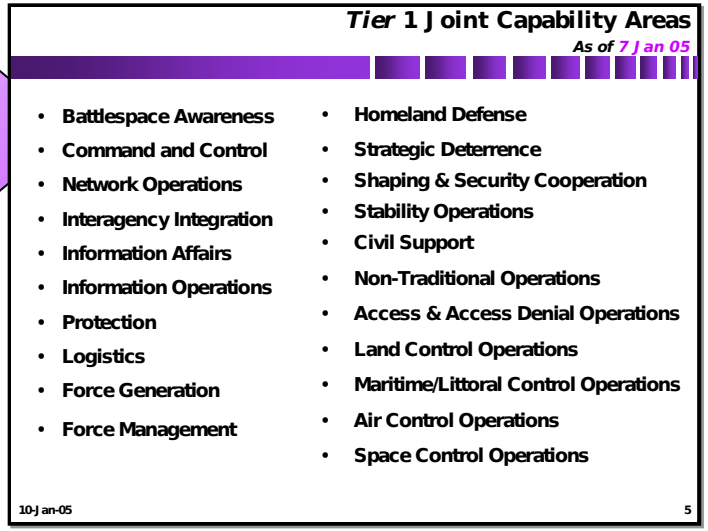
Joint Staff / J-8
Capabilities and Acquisition Division

Back UP

What Constitutes a Tier 1 Joint Capability Area?

TIER 1 CONSTRUCT

- **Capability Areas** generated and provided to **a regional COCOM by a supporting COCOM, Agency, or Service**
- **Capability Areas** delegated by **a CJTF to one of his component commanders for execution as the 'supported commander'**
- **Capability Areas** provided through **a Regional COCOM to a CJTF** for execution by **one of the JTF staff principals in order to deliver specific functional capability across all the components of the JTF**
- **Capability Areas** identified by senior leaders **for Tier 1 visibility**



Joint Capability Areas are those capability areas typically *received, managed, delegated, and/or executed* at the CJTF level.

- Received: Capabilities typically received at the CJTF level from a supporting COCOM, Agency, or Service
- Managed: Functional or enabling capability areas typically applied across the JTF; normally managed by JTF-level staff principals
- Delegated: Operational capability areas typically "delegated" to a component commander within a JTF for execution.
- Executed: Joint Capability Areas worthy of or requiring CJTF-level

FY 06 IPLs and the JPG

IPLs
115 issues)

Department-Level Assessment

Functional Capability Boards

Services, CoComs, OSD, JS

COCOM/JROC Hub Trip

69 Capability Gaps
(within 30 Capabilities Areas)

- Assume Risk
- Under Study
- Program on Track
- Adjustment Require

Where to Adjust

- POM 06
- Program Review
- POM 08

Fall PR/BR

OSD PAE Led

Three Star Programmers
Assess Offsets

FCBs, Services, CoComs, OSD, JS

JPG

19 Capability Gaps

+ 6 additional Capability IPLs

25 Capability Gaps Filled

Bounding Strategic Challenges

LIKELIHOOD

Higher

Lower

Irregular

- Non-state and state actors employing "unconventional" methods to counter stronger state opponents—terrorism, insurgency, etc.

Catastrophic

- Terrorist or rogue state employment of WMD or methods producing WMD-like effects against American interests.

Traditional

- States employing military forces in well-known forms of military competition and conflict.

Disruptive

- Competitors employing technology or methods that might counter or cancel our current military advantages.

Lower

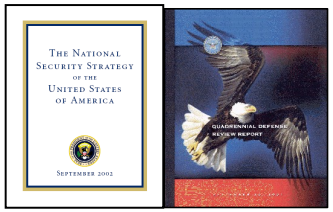
VULNERABILIT

Higher

Increased focus on irregular, disruptive and catastrophic capabilities

JROC Capabilities Based Process

OSD Policy
Strategy
Strategic Guidance
(e.g., JopsC)



Irregular	Catastrophic
Traditional	Disruptive

Defense Planning Scenarios

1-4-2-1 and 'stretch goals' (10-30-30)

JROC macro

Warfighting Capabilities and corresponding force structure

Operational Availability Assessments

JCIDS
For material and non materi solutions

Functional Capability Boards micro

Joint Concepts (e.g., JIC

Capabilities Based Assessments

Capabilities Gaps and Overlaps

JROC Capabilities Based Process

Defense Planning Scenarios

1-4-2-1 and 'stretch goals' (10-30-30)

Irregular | Catastrophic

Traditional | Disruptive

OSD Policy
Strategy

Warfighting Capabilities and corresponding force structure

J8
macro

Capabilities that
Reveal risk or
Excess overmatch

Operational Availability Assessments

Functional Capability Boards
micro

Future Force

Unclassified Working Paper

Joint Forceable Entry Operations
Joint Integrating Concept

Future Capability

Joint Concepts (e.g., JIC

Capabilities Based Assessments

Validate capabilities gaps and excesses

New Overarching JCIDS Document

Joint Capabilities Document (JCD)

- **Create a new document to capture COCOM and joint warfighting capability needs**
  - **Joint Capabilities Document (JCD)**
  - **Incorporates results of the FAA and FNA**
  - **Prioritizes the gaps based on mission impact**
  - **Recommends sponsors to perform the FSA and develop an ICD for the gaps**
- **This new document will be developed by COCOMs or FCBs**
  - **Sponsors may develop after pre-coordination with the FCBs and COCOMs**

Insensitive Munitions Certification

- **Roles and Responsibilities changed to reflect J8/DDFP role in certification (shifts from J4)**
- **FCB role in assuring certification or processing of waiver through the JROC defined**
- **Staffing process updated to reflect IM Cert incorporation**
- **Before proceeding to JCB/JROC program will be “certified” or have waiver being processed in parallel**

Congressionally Mandated KPPs

- **Congress mandated KPPs on Force Protection and Survivability for:**
  - **Systems employed in a asymmetric warfare environment**
  - **That are :**
    - **Manned**

      or
    - **Designed to enhance personnel survivability**
  - **Does not apply to systems that have entered LRIP**

- **OSD AT&L Policy guidance being developed**
- **JROCM with transition guidance being developed**

Joint DOTMLPF Change Requests

- **Incorporating the Joint DCR into 3170 will bring the two processes into synch**
- **The merge resulted in two changes**
  - **Incorporate the DCR format as is**
    - **DCRs will be staffed through the standard KM/DS process**
    - **Emergency DCRs will have an expedited process (Flag review only)**
  - **Change the ICD format**
    - **The FSA may identify a non-materiel change as an alternative**
- **Working on a new implementation oversight process using the JCB**

Transition of ACTDs

- The process for transitioning ACTDs into the JCIDS/Acquisition process defined
- ACTD development and execution is under the direction of AT&L
  - Selection of ACTDs is done with the advice of the JROC (FCBs)
- Transition methodology for successful ACTDs defined
  - Entry at MS B
    - MUA substitutes for ICD
    - CDD will be written for MS B
  - Entry at MS C
    - MUA substitutes for ICD
    - CPD will be written for MS C
- If the ACTD is being merged with an existing

Guidance on Key Performance Parameters

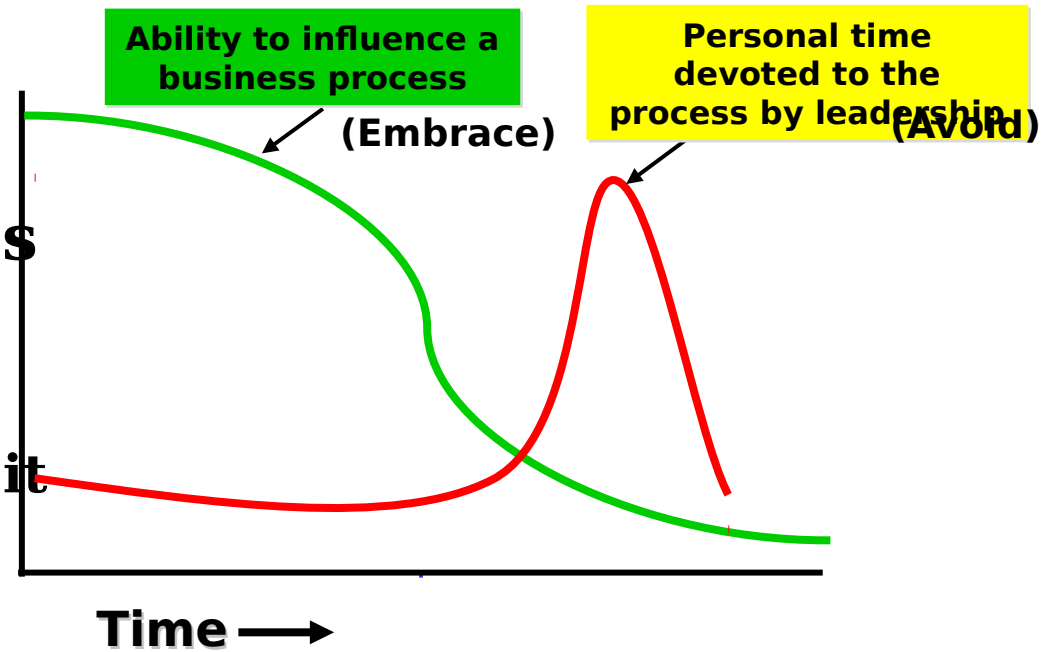
- **Each KPP should be:**
  - **Traceable to one or more capability characteristics in an Initial Capabilities Document (ICD) and/or support the attributes identified in the Joint Operations Concepts**
  - **Measurable and testable**
- **Deviations from KPP thresholds will be considered by the validation authority**
  - **KPP changes are approved by the validating authority**
  - **Is the reduced capability still operationally effective?**
    - **What is the risk to mission accomplishment?**
  - **Is there a plan to meet the original threshold in a future increment?**

Legacy Mission Area ICDs

- **Directed via JROCM in Jun 04**
- **Converting CRDs to MA ICDs required compromising the ICD format to incorporate key aspects of the CRDs**
  - **KPPs versus Measures of Effectiveness**
  - **Architecture products beyond an OV-1**
  - **CRD crosswalk**
  - **FSAs may or may not have been done**
- **Recommended grandfathering guidance**
  - **No further MA ICDs to be developed**
  - **When updated, MA ICDs should be converted to either ICDs or JCDs**
  - **CRD crosswalks will continue to be used until MA ICDs converted to new documents**

JROC Impact using JCIDS

- **Desired Attributes of DOD Decision Process**
  - **Responsive**
  - **Flat**
  - **Involve leaders "when it counts"**
  - **Agree on facts**
- **New 3170.01D**
  - **Top down**
  - **Born "Joint"**
  - **Tees up issues with wider input earlier in the process**



Action Agent:

Functional Capabilities Boards

New JCIDS Documents

- **Joint Capabilities Document (JCD)**
  - **Identifies capability gaps or other deficiencies**
  - **Supports development of one or more ICDs**
  - **Developed primarily by COCOMs and FCBs**
  - **Can be developed by a sponsor under certain conditions**
  - **Updated as required**
- **Joint DOTMLPF Change Recommendation (DCR)**
  - **Identifies an approach to filling a capability gap through non-materiel changes**
  - **Developed primarily by COCOMs**

Joint Capabilities Document (JCD)

Purpose of the JCD:

- **Describes capability gaps as determined by the functional area and needs analyses**
- **Identifies the relative importance/priority of the gaps**
  - **Highlights capability gaps that are important enough to justify pursuing a solution**
  - **Identifies gaps where risk may be taken`**

When is a JCD required?

- **COCOM generates based on emerging/changing missions**
- **FCBs generate based on the results of a JIC**
- **Sponsors may generate when pre-coordinated with COCOMs and FCBs**

Conclusions on JCIDS

- **Provides an enhanced methodology to identify and describe capabilities gaps and redundancies**
- **Helps to prioritize capability proposals**
- **Facilitates broad review of capability proposals independent of ACAT (Acquisition Category)**
- **Engages the acquisition community early**
- **Improves the identification of non-materiel alternatives**
- **Improves collaboration with other departments and agencies**

JCIDS Documents

- **Initial Capabilities Document (ICD)**
  - **Identifies a capability gap or other deficiency**
  - **Describes evaluation of DOTMLPF approaches**
  - **Supports AoA, Concept Refinement and Milestone A**
  - **Not normally updated once approved**
- **Capability Development Document (CDD)**
  - **Identifies operational performance attributes of proposed system**
  - **System specific, applies to single increment (in an evolutionary program)**
  - **Results from Technology Development and supports Milestone B**
  - **Updated or rewritten for subsequent increments**
- **Capability Production Document (CPD)**
  - **Identifies production attributes for a single increment of a program**
  - **Prepared during System Development and Demonstration**